ThinkReality A6

The ThinkReality A6 is an Augmented Reality head-mounted display featuring innovative functionalities that will change the way organizations work. This mobile device is designed to help the workforce use AR applications to receive expert assistance, reduce repair times, eliminate errors, streamline complex workflows, improve training quality, and save costs.

The ThinkReality A6 is optimized to work with Lenovo’s ThinkReality Platform, a scalable software solution that allows enterprises to leverage a portfolio of turnkey AR/VR solutions that are certified for a variety of industries—or build, deploy, and manage their own. Our platform is device- and cloud-agnostic, which means solutions can be easily ported across enterprise infrastructures using the A6 and other AR/VR devices. All of this is backed by Lenovo’s dedication to security and commitment to providing outstanding enterprise support.
THINKREALITY PLATFORM
The ThinkReality Platform provides development tools for easily building custom AR and VR applications as well as certified turnkey AR and VR solutions that span a variety of use cases and industries. The platform enables efficient and scalable deployment and management of these solutions for enterprises.

SUPERIOR VISUAL QUALITY
With Lumus Waveguide optics boasting 1080p resolution per eye and a 40° Field of View, the ThinkReality A6 provides enhanced image quality and a greater visual field of view for an engaging user experience.

HIGH PERFORMANCE
The A6 is powered by the Qualcomm® Snapdragon™ 845 SoC (System-on-Chip) Processor. Along with the Intel® Movidius™ VPU, the A6 head-mounted display delivers superior performance that is highly power-efficient, allowing users to do a lot more with this wearable device.

EASY TO USE
Interacting with the ThinkReality A6 can be done via voice, gesture, and gaze control, or with a 3DoF (Degrees of Freedom) hand controller, offering users an intuitive experience through various input methods that suit the situation.

INTELLIGENT AND PURPOSEFUL
The ThinkReality A6 comes equipped with a depth sensor, VPU, 13MP RGB camera, two fish-eye cameras, and an IMU (Inertial Measurement Unit) to enable 3D visualization and digital information overlay. Object recognition is coming soon.

ENHANCED MOBILITY
Weighing less than 380g, the lightweight and comfortable A6 improves efficiency and on-the-go productivity. The removable 6800mAh battery offers up to 4 hours of power, enough to execute critical business operations without running out of battery.

industry benefits

INDUSTRIAL
The ThinkReality A6 can help optimize industrial operations and increase manufacturing throughput by simplifying complex work processes. The device can improve efficiency and safety while minimizing costs and errors. Manufacturing companies can accelerate employee training via real-time interactive 3D digital content.

Using the ThinkReality AR Platform, companies can access expert guidance remotely, receive step by step instructions for assembly processes, on-the-job machine set up, and maintenance work. By integrating IoT data with the AR headset users can quickly react to problems and address issues more efficiently.

AEC
The Architecture, Engineering, and Construction (AEC) industry can rely on the ThinkReality A6 to explore practical applications of Augmented Reality on real-world projects. With this portable, lightweight head-mounted display, architects and engineers can view their three-dimensional designs at scale overlaid on top of real-world work sites. They can demonstrate how different design elements might look in the final product using digital modeling.

ThinkReality A6 enhances the user experience and facilitates effective collaboration, improved data visualization, accessibility to expert instructions, accelerated decision making, and increased safety.

industrial versatility
With the functionality of the A6, users can extend the deployment of AR solutions to almost any other work environment where hands-free digital assistance can enhance productivity and efficiency. For instance, the A6 can prove to be helpful in healthcare, retail, logistics, or design environments where simple digital instructions and compliance are needed, or in environments where complex spatial computing and artificial intelligence are needed.
ThinkReality A6 Headset

form factor
Visor/Top down optics

display optics

| OPTICS TYPE | Binocular |
| OPTICS TECH | Lumus Waveguide |
| OPACITY OF OPTICS | High see through |
| FOV (DIAGONAL) | >40° FOV |
| DISPLAY BRIGHTNESS | 600 nits Max |

resolution
1080p resolution (per eye), 16:9 ratio

support users wearing eyeglasses
Yes

vision processing unit
Intel® Movidius™

sensors and input

| DEVICE TRACKING | VIO (6DoF Inside Out), Dual Fisheye |
| RGB CAMERA | 13MP AF, 30 FPS at 1080p |
| DEPTH SENSOR | Yes, Time-of-Flight (TOF), 62° x 45° |
| IMU | Yes (glasses, controller, and compute box) |
| AMBIENT LIGHT SENSOR | Yes |
| SPEAKERS/AUDIO | Yes, surround sound (Audio codec) |
| MICROPHONES | Two noise cancelling mics |

IP rating
IPSI

software features

| VOICE RECOGNITION | Yes (commands) |
| GESTURE SUPPORT | Yes |
| OBJECT RECOGNITION | Yes (coming soon) |
| IMAGE RECOGNITION | Yes |
| HEAD/GAZE TRACKING (UX/UI) | Yes |
| BARCODE READER | Yes (via camera) |

weight
<380g

accessories (in box)

USB Type-C Display Cable
Adjustable Arm Band
Changeable Nose Pieces
Bluetooth 3DoF Controller w/Clip
USB Type-C Charger
USB Type-C Data and Charging Cable
Optional Desktop Battery Charger (not included)
Neck Lanyard
Belt Clip
Cleaning Tool
Microfiber Cloth
User Guide

A6 Compute Box

technical specifications

| SOC | Qualcomm® Snapdragon® 845 Processor |
| OS | Android 8.1 |
| MEMORY | 4GB |
| STORAGE | 64GB SD Storage + microSD (up to 256GB) |
| I/O | USB 3.1 (Type-C) headset
USB 3.0 (Type-C) charging/data |
| BATTERY | > 4 hours (26Wh) – Removable/Replaceable |
| WIFI | Yes, 802.11ac 2x2 (2.4/5 GHz) |
| BLUETOOTH | Yes, 5.0 BLE |
| WIRELESS NETWORK (4G, 5G) | No |
| NFC OR RFID READER FOR SMART CARDS | Yes |
| AUDIO | Yes, 3.5mm audio jack |
| WEIGHT | 240g (with battery) |

ThinkReality Platform features and benefits

• Build, deploy, and manage custom AR and VR applications, cloud services, and software
• Device, Cloud, and Market Agnostic
• ThinkReality SDK for Unity
• Scalable Cloud Services
• User, Device, and Application Management
• Enterprise Systems Integration
• Management Portals
• Workflow Builders
• Certified turnkey solutions for all industries
• Scalable and secure end-to-end
• Mobile Device Management (MDM)
• Cloud and on-prem options
• Support Lightweight Directory Access Protocol (LDAP)
• Support Azure Active Directory (AAD)

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